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Texas Agricultural Extension Service

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AGRICULTURAL & FOOD POLICY CENTER

DAIRY PRICE AND INCOME SUPPORT POLICY

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Contents

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1. Policy Perspectives: Problems, Goals and Tools

The mid 1980s represented a turning point in dairy policy. The basis for support price adjustments officially changed from being parity based to being driven by the level of government purchases. To moderate support price adjustments, voluntary production control programs, similar to those existing in crops, paid dairy farmers to reduce production. A portion of the costs of these programs was born by assessments on farmer milk sales. This combination of actions finally reduced the level of government stocks and purchases to tolerable levels in 1987. These policies were pursued despite considerable pain to many dairymen. Were it not for strong commercial sales spurred by advertising programs, prices would have fallen even further.

Discussions of policy goals and the implications of program options have become increasingly prominent in dairy policy debates. Whether or not they address the goals explicitly or implicitly in coming policy development, policy makers will set a course for dairy programs that could determine how and how well the dairy sector will adjust to the technological and economic changes it will undergo in the future.

Problems and Goals Prior to the 1980s

The architects of New Deal agricultural policy identified a key farm problem—low prices. Their one objective was to raise farm prices to 100 percent of parity, a goal originally sought through a form of production controls. What emerged by the late 1930s was a dairy policy that largely embraced the goals and enforced the pricing procedures that cooperatives could not maintain on their own. Federal orders enhanced the bargaining power of farmers and enforced a more equal distribution of returns to farmers. Even so, orders were not able to raise farm prices and maintain secure markets to the satisfaction of dairy farm interests.

The next major attempt to raise farm prices occurred during World War II as part of a larger effort to stimulate food production. After the war, with the influx of young men anxious to return to the farm, it was deemed necessary to legislate a permanent program that helped to ensure adequate returns and secure markets to existing and new generations of dairy farmers. The Agricultural Act of 1949 authorized the Secretary of Agriculture to support farm prices at no less than 75 percent of parity and no more than 90 percent of parity. This defined in practice, if not in principle, the boundaries of adequate returns and reasonable prices. Anything more precise than that was left to the discretion of the Secretary. Stable and secure markets were essentially guaranteed by the manner in which farm prices were supported. The program required the USDA to buy manufactured dairy products at wholesale prices designed to give manufacturers enough money to cover their costs and pay farmers the equivalent of the support price. In so doing, the program increases in support essentially allowed the USDA not only to raise prices but also to guarantee a secure and essentially unlimited outlet for market surpluses. To be sure, not every farmer or processor had a guaranteed outlet for his or her product, but USDA's willingness to purchase any quantity of cheese, butter and nonfat dry milk at a given price came just one step short of that.

From 1949 through 1978, under the traditional purchase program, annual net removals on a milk equivalent basis averaged four percent of total milk marketings. This implies that the operational goal of the support program is to support farm prices slightly above levels that would perfectly balance commercial supply and demand, resulting in a perennial, but fairly small surplus. It is evident that both price enhancement and stabilization have been important goals in the administration of the price support program, but prior to 1979, price enhancement goals were clearly tempered by some sensitivity to market conditions.

Policy goals across agriculture shifted perceptibly during the 1970s. Reliance on intervention was replaced by faith in demand-induced growth stemming largely from greater agricultural exports. Although cash grain farmers prospered during this period, dairy farmers fared poorly as feed prices increased while support prices increased slowly and reluctantly. Between 1973 and 1975 domestic production was less than commercial disappearance, import quotas were greatly expanded to make up the shortfall, and net removals averaged only one percent of production. In 1976, President Carter fulfilled a campaign pledge to increase the support price for milk. Congress followed by enacting legislation in 1977 and 1979 that required milk prices to be supported at no less than 80 percent of parity, with semi-annual adjustments. Thus, the course was set for a level of enhancement unparalleled in the 30-year history

of the program.

The shift in the mid-1970s from a very free, market-oriented policy to one of enhancing farm milk prices occurred primarily for political reasons. Dairy farmers who felt they had been short-changed during the Nixon administration convinced President Carter and Congress that they deserved compensating treatment. High parity prices and cost data convinced Congress that milk prices were not keeping up with production costs. Whatever relationship these high parity prices may have had to costs, they proved to be totally inconsistent with market supply and demand. Parity had become unreliable as a guide for setting support prices.

Current Problems and Policy Goals

Since 1980, the dairy industry has struggled to get surpluses and government spending under control. Congress grappled with and changed dairy policy nearly every year between 1980 and 1985. Each new policy has been a bit harsher than the prior one. In April 1981, the semi-annual price increase required under legislation was suspended. In December 1981, support prices were essentially severed from the parity standard. Although not related to parity, small annual increases in support prices were permitted in the 1981 Agriculture and Food Act. In 1982, it became apparent that even the first small increase was unwarranted, given growing surpluses. Amendments were added to the Omnibus Budget Reconciliation Act of 1982, which froze the support price at the level it had been since October 1980, and the Secretary was granted authority to assess farmers directly to help offset some of the program costs. Assessments of 50 cents per cwt of milk marketed were begun as a first experiment in program cost sharing. The first assessment was nonrefundable; the second was refundable to farmers who reduced their marketings.

In November 1983, a four-point compromise, reflecting each of the major proposals that had been advanced to deal with surplus conditions, was adopted. The Dairy Production Stabilization Act combined price cuts, a mandatory assessment, a mandatory promotion program funded by farmer assessments, and a "milk diversion program" which offered cash payments to farmers who agreed to market less milk than they had during a base period. It would appear that when surpluses first began to grow, Congress tried to do as little as possible, addressing first the principal budget concerns.

After a discouraging experience with the only temporarily effective diversion program in 1984 and 1985, unprecedented production and USDA removals prompted the Congress to pass the Food Security Act of 1985. This Act established a two part dairy program. The first part contained a voluntary Dairy Termination Program (DTP) which brought farmers out of production for a five year period. The second part included a supply-demand adjuster that moved the support level up or down as USDA removals fell or increased.

The goal of the 1985 Act was to eliminate 12 billion pounds of milk during the 18 month exit period. The exit period was divided into three herd buyout periods. The exit period began on April 1, 1986 and ended September 30, 1987. Production for calendar 1985 totaled 143.15 billion pounds production, for 1986 totaled 143.38 billion pounds, and calendar 1987 production totaled 142.46 billion pounds. The 12 billion pound goal was reached in terms of the milk production base established at the beginning of the DTP.

The second part of the 1985 fixed support levels for the period January 1, 1986 through December 31, 1986 at $11.60 /cwt for milk at 3.67 percent butterfat. For January 1, 1987 through September 30, 1987, the support price was set at $11.35. From October l, 1987 through December 31, 1990, the support price was set at $11.10 /cwt. After December 31, 1987, the support price was subject to 50 cents per hundredweight reduction on January 1 each year if projected CCC removals exceeded 5 billion pounds. The 50 cent drop occurred January l, 1987.

During the last half of 1987, Congress wrestled with various budget-deficit reduction proposals. To meet deficit reduction requirements during the last quarter 1987, the prices the USDA paid for CCC commodities were cut 8.5 percent. However, the dairy industry and Congress compromised on a 2.5 cent /cwt assessment on all producer milk to meet the deficit reduction requirements.

When all the dust settled, milk producers went into 1988 with a support price of $10.60 and a 2.5 cent assessment. Congress and the administration hoped for stable or possibly decreasing production for 1988.

Problems, Goals and Policies of the Future

Because of lower production and higher consumption, USDA net purchases and government costs were lower in 1987 than in 1986. Nevertheless, the future is uncertain. Prospects through the end of the 1980s are that net removals will at best stay at the 1987 level. The closer supply-demand balance is clearly an improvement, but it is also clear that current policies have not solved the long-run problems facing the dairy industry.

Any number of policy options are available and several will be seriously advanced in the debate as the

current farm bill expires. Some people will support a price-oriented program. A few will call for sophisticated plans to restructure and centralize management of farm supplies. A target price deficiency payment program similar to that used for grain and other crop programs is endorsed by some people. Other proposals that will be debated include regionalized base and surplus management schemes, and two tier pricing plans. The total elimination of any support mechanism seems unlikely.

In the following chapters, several alternatives for supporting the prices and incomes received by dairy farmers are analyzed. They are different not only in the way they work but, more importantly, in what they seek to accomplish. Policy goals are neither right nor wrong; they are based on individual or shared values and beliefs. Likewise, policy options can only be judged by a set of policy goals. Two elements of dairy policy federal milk marketing orders and advertising and research programs, are not discussed because they are viewed as being primarily industry self-help programs. The challenge before policy makers after the 1985 farm bill expires will be to resist the temptation to legislate another compromise that deals with the persistent short-run problems, but which fails to face the long-run issues. Will dairy policy for the next decade seek primarily to preserve and protect dairy farm interests as they exist today, or will it sacrifice a measure of individual protection to promote a greater flexibility and adaptability to the technological and economic changes that will buffet and challenge the dairy industry as it approaches the 21st century?

2. Cost-Pricing

"If only I could be guaranteed my cost of production plus a reasonable profit," is a statement often heard at meetings of dairymen and farmers in general. This philosophy has led to proposals to adjust the support price by means of a revised cost based parity formula or by actual changes in production costs. Such proposals may be referred to as "cost-pricing."

What Is Cost-Pricing?

The underlying notion of cost-pricing—prices that move in general concert with costs—is economically and philosophically appealing. Of course, a number of factors other than cost of production affect the appropriate price level at any given time. But cost-pricing could be used as the basic support price mover.

The USDA has used the cost-pricing concept to make annual changes in target prices for feed grains and wheat. To a degree, some state-controlled milk markets use the mechanism today. State milk agencies that use the public hearing process consider testimony on the cost of producing milk. States such as California, Virginia and North Carolina use cost based economic formulas to adjust prices paid producers. Key factors such as feed costs and labor costs are heavily weighted in these formulas.

If the underlying goals of the support price program are to provide an income support and stability for dairy farmers, cost-pricing may have a lot to offer. However, if the goal is to allow long-term adjustment in the industry, cost pricing leaves much to be desired.

Alternative Mechanisms for Implementing

Two cost-pricing mechanisms have been widely discussed in recent years: dairy parity and actual cost of production (COP).

Cost of Production. In 1972, Congress mandated that the USDA study and annually update the U.S. average costs of producing milk and major field crops. The idea was that these cost estimates could be used as a guide for setting the level of either price or income supports for farmers.

A number of questions can and should be raised about what costs are included in any cost of production estimate and how they are measured. Perhaps the most important questions concern the treatment of family labor, management, capital and home-raised feed costs.

Dairy Parity. Under the traditional parity procedure, changes in the support price are based on changes in a general index of prices paid by farmers relative to a general index of prices received by farmers. The dairy parity approach simply relates the support price to an index of prices paid by dairy farmers to produce milk. In other words, the prices-received measure is dropped and the prices-paid index is tailored to reflect milk production specifically, as opposed to all agricultural production.

The components included in a dairy parity index and their relative weights would likely be based on cost of production surveys, as is currently the case for USDA's prices-paid indices. Even with that guideline, important

decisions must be made about what should be included in the index and how much each item should be weighted. A key factor would be whether or not some allowance for family living costs should be included or whether only the prices of purchased inputs used directly to produce milk should be used in the index.

One of the central issues in dairy parity pricing is whether the price ought to be adjusted for changes in output per cow. Unless such an adjustment is made, the index does not reflect adequately average costs as technology changes productivity.

Consequences of Cost-Pricing

Compared to some alternatives, cost-pricing is not a radical change in the current method of establishing the price support. Yet, if implemented properly, it could provide an income floor for producers and reduce the possibility of amassing large surpluses in the future. Cost-pricing combined with secretarial discretion and/or supply-demand adjusters could be even more effective in balancing production and consumption.

The roots of current problems lie in the parity formula which was used as the support price mover until 1981. The all-agriculture parity formula no longer adequately reflects conditions in the dairy sector. The 75 to 90 percent parity range authorized in 1949 sufficed for 30 years. But the 80 percent minimum mandated in the 1977 Farm Bill did not allow sufficient flexibility. This triggered overproduction in the late 1970s, a condition which persists.

Parity could still conceivably be used as a price adjuster, perhaps with a discretionary range of 45 to 65 percent. But most believe that it would be better to abandon this mechanism. Perhaps use of a cost-pricing program would "fine tune" a program that worked quite well for 30 years.

Cost-pricing provides for an automatic price mover. Cost-pricing would reflect changes in cost conditions within the industry. During the 1970s, when dairy costs were escalating much faster than prices, the general parity index did not reflect these changes. Conversely, in the late 1970s, costs stabilized as the support price continued to rise. Cost-pricing would circumvent such problems.

The true industry average cost may not be acceptable to the majority of the producers. This is the case because the majority of the milk is produced by the largest producers who have lower costs per cwt. The average costs thus more closely reflect the cost of a small number of large producers rather than the large number of small and moderate size producers. This creates criticism from the majority of the producers that the average cost is not high enough.

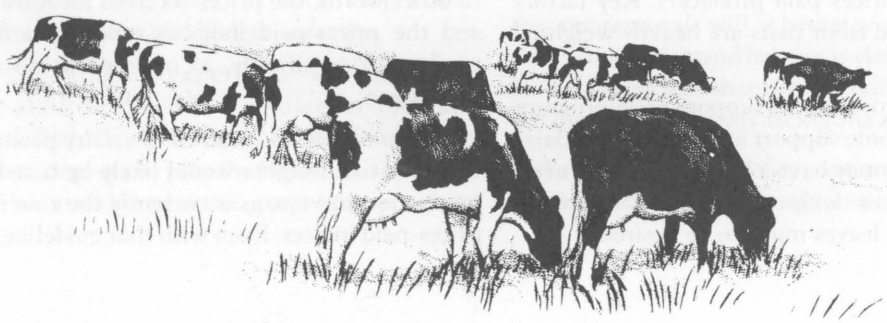
Cost-pricing would call for only minor alterations in a system of price supports that many believe has worked quite well. Other programs, such as production controls or target prices, would involve major surgery that would completely revamp the philosophy of dairy policy.

Gains in productivity have enabled dairymen to offset many input cost increases. With predictions of a technological explosion in the dairy sector, there is even greater need for efficiency in the price support mechanism. Cost-pricing that takes into account changes in output per cow would account for such efficiency changes. The COP method captures efficiency gains made during the production period and would be reflected in the next production period.

Cost-pricing could lead to conflicts between large and small producers, between producers in different regions, and between producers who own their operations outright and those who rent or are highly leveraged.

While costs are important, they represent only one dimension of the appropriate level of milk prices. Another equally important aspect is demand. Cost-pricing ignores the demand side of the price equation. This weakness could be overcome by moving to economic formula pricing incorporating both cost and demand factors, by tying cost-pricing into a supply-demand adjuster or by giving the Secretary a measure of discretion.

Finally, cost-pricing would not mean a stable price. Grain prices are expected to continue to fluctuate widely and, because feed accounts for almost half of cash milk production costs, support prices would rise and fall in conjunction with grain prices.



3. Supply-Demand Adjuster Pricing

Supply-demand adjuster pricing is a systematic procedure for adjusting the dairy support price on the basis of market conditions. The adjuster is sometimes called a "trigger" mechanism for making a price support change. The measure of supply-demand conditions used to adjust the support price would likely be the quantity of Commodity Credit Corporation (CCC) purchases of dairy products. The price adjustment schedule would be geared either to the quantity of purchases acquired in the preceding market year, those projected for the forthcoming market year, or some combination. The dairy program authorized by the 1985 Farm Bill implemented a type of supply-demand adjuster.

In a qualitative sense, the dairy support price has almost always been adjusted in light of supply and demand conditions for milk. The Agricultural Act of 1949 called for flexible price supports in the range of 75 to 90 percent of parity with "adequate supply" specified as the adjustment criterion. For many years, the 15-point parity range permitted the Secretary to make adjustments to the dairy support price, even though no schedule was stated.

One of the simplest methods to track supply and demand changes are the government purchases through the Commodity Credit Corporation (CCC) of dairy products in the operation of the support program. Through the CCC, the USDA is authorized to buy from processors products for which there is no readily available commercial market. As CCC purchases increase, it is assumed a surplus of milk is developing. In order to discourage production of the surplus milk, the USDA can lower the support price. The lowering of the support price is intended to persuade unprofitable operators to leave milk production, and discourage new investment by those not already producing milk.

The 1985 Food Security Act contained a provision tying support price changes to potential (CCC) product removals. If for any of the calendar years 1988, 1989, and 1990 CCC removals or expected removals exceed 5 billion pounds milk equivalent, the Secretary of Agriculture could drop the support price 50¢/per cwt. If the expected removals were less than 2.5 billion pounds then the support price is increased 50¢. (Example 1)

Example 1. Calendar Year Supply-Demand Adjuster in 1985 Food Security Act

Projected CCC Purchases (Milk Equivalent) (billion pounds)	Supply-Demand Price Adjustment cents per hundredweight
2.5 or less	+ 50 cents
greater than 2.5 but less than 5.0	no change in price
5.0 or more	- 50 cents

Any schedule should: 1) include both plus and minus price adjustments, 2) reflect price adjustments that are large enough to have significant effects on the supply-demand situation, and 3) be sufficiently detailed that the schedule is a sensitive measure of the supply of milk relative to demand as measured by CCC purchases. (Example 2)

Example 2. A Hypothetical Supply-Demand Adjuster Schedule

CCC Purchases (Milk Equivalent)	Supply-Demand Price Adjuster
0	+ 9 percent
1.25 billion pounds	+ 6.75 percent
2.5	+ 4.5 percent
3.13	- 2.25 percent
3.75	0
4.38	- 2.25 percent
5.0	- 4.5 percent
6.25	- 6.75 percent
7.5 billion pounds	- 9.0 percent

The two critical decisions in setting up a schedule are:

- The level of CCC purchases at which no price adjustment is called for.
- The amount of price adjustment for a given change in CCC purchases relative to this base level.

There are a number of ways a supply-demand adjuster schedule can be used. The two primary ways are:

1) Without an automatic price mover

2) With an automatic price mover

Without an Automatic Support Price Mover. By this system, the support price is not tied to any kind of a mover such as parity or cost of production.

It moves only in relation to changes called for by the quantity of CCC purchases. For example, assume that the support price is $11.10 per cwt. Also, assume that projected CCC purchases for the year beginning January 1 are estimated to be 5 billion pounds of milk equivalent. In this situation, the supply-demand adjuster calls for a $0.50 per cwt reduction in the support price on January 1. Similarly, on January 1 the following year, if CCC purchases were projected to be less than 2.5 billion pounds milk equivalent, the support price would be increased by $0.50 per cwt.

The most serious criticism of using a supply-demand adjuster without an automatic price mover is that the support price is adjusted exclusively in relation to market conditions. No philosophy undergirds the support price other than that government purchases should be within a given range. A secondary concern is that the forecasted level of production is a product of the forecaster. Forecasters' predictions vary and can be politically motivated. The supply-demand adjuster would provide dairy farmers with a degree of price stability, but not as much price security as a cost-pricing procedure.

With an Automatic Support Price Mover. With this type of program, a supply-demand adjuster would be used in conjunction with an automatic price mover. Consider the following example using a dairy specific parity index or a cost of production change as the automatic price mover. Assume again that the support price is $11.10 per cwt. Further assume that the factors in the cost-pricing mover indicate that the new support price should be increased to $11.54. Now, the current supply-demand adjuster would be applied to the revised price of $11.54. With projected CCC purchases at 5.5 billion pounds, the support price would be adjusted $0.50 per cwt downward. Thus, the new support price would be $11.04 per cwt.

Using a supply-demand adjuster in conjunction with an automatic price mover acknowledges that no automatic price mover ever has been or ever will be perfect. For example, cost-pricing may reflect supply changes, but it cannot capture demand changes. If one does not want the Secretary of Agriculture to make adjustments on a judgment basis, then the use of a supply-demand adjuster is an appropriate option. It is superior to secretarial discretion insofar as it brings a clearly understood systematic adjustment to the price support decision.

Consequences of Supply-Demand Adjusters

Several conditions or factors rationalize the adoption of a supply-demand adjuster mechanism to affect support prices.

- In the absence of production controls, some type of a market limit to the support price is essential. A supply-demand adjuster can provide such a limit.
- A supply-demand adjuster may reduce the influence of secretarial discretion or political pressure. Also, the logic of a supply-demand adjuster could be a buffer against political efforts to adjust the support price.
- The supply-demand adjuster has an explicit market orientation that can help facilitate resource allocation without sacrificing price stability.
- The supply-demand adjuster is cost sensitive with respect to the CCC purchase program for dairy products. Both the quantity of purchases and product purchase prices would be affected by the price adjustment.
- Adjustments to the support price because of supply-demand adjustments may receive broad acceptance because they could be anticipated, and their rationale would have general pre-agreement. The entire dairy industry would be familiar with the mechanism and would know what to expect in a forthcoming price support decision.
- Supply-demand adjusters are not without controversy. Analysts differ on their estimates of forthcoming CCC purchases. Political pressures can be brought to bear on these estimates—particularly when they are close to triggering a price change.

Implementation of a supply-demand adjuster would fine tune the way that things have been done. It is intended to help prices more closely reflect market conditions and to avoid the surplus milk or price instability problems generated when support prices are allowed to become far out of synch with the market.

To the extent that supply and demand conditions must be recognized in establishing the support price, the adjuster mechanism provides an objective and effective means of making such adjustments. In the absence of production controls, some formal or informal type of supply-demand adjuster to the support price is essential.

4. Voluntary Production Controls

For most of agriculture, efforts to control production have been voluntary. Beginning in 1983 with the diversion program, the dairy termination program was the second time a voluntary program was used to control milk production. Voluntary controls thus far have been implemented with mixed success in the dairy sector. This experience has not been much different than for crop programs.

What Is a Voluntary Controls Policy?

A voluntary controls policy provides economic incentives to dairymen who agree either to reduce their marketings or to terminate production. This differs from mandatory programs where dairymen are required by law to maintain marketings or production below a specified level or receive a very low price for excess production. Voluntary programs with incentives have been more acceptable politically than mandatory programs with penalties.

When a program is voluntary, participation depends upon the size of the economic incentive relative to the requirements for compliance. Voluntary programs use bases to measure compliance of individual dairymen and to reward producers for compliance. Legislative action could either mandate the program on some well-defined, automatic base such as average production over the past 3 to 5 years or provide discretionary authority to the Secretary of Agriculture for its implementation.

Voluntary supply control policies in agriculture have been used extensively since the 1960s. For example, to qualify for deficiency payments, loan rates or the farmer-owned grain reserve, grain farmers have been required to set aside or retire land from production in most years since 1978. For dairy, a voluntary supply control program was authorized by the controversial Omnibus Budget Reconciliation Act of 1982. Producers could receive a refund of the second 50-cent assessment if they reduced their milk marketings by a specified amount below their base. The milk diversion program of the Dairy Production Stabilization Act of 1983 provided payments for a 15-month period (January 1, 1984 through March 31, 1985) to those producers who contracted with USDA to reduce their marketings from 5 to 30 percent below their base.

The Dairy Termination Program authorized in the 1985 Farm Bill provided payments to the dairy producer to refrain from milk production for 5 years and slaughter or export of the producer's entire dairy herd.

Voluntary production controls make sense only when supplies exceed commercial demand by a sizable amount. Moreover, they are most likely to be necessary when attempts are made to support the price of milk at a level that supports farm prices and income.

Alternative Mechanisms for Implementing

The alternative mechanisms for providing some type of economic incentive to dairymen to reduce their supply include incentives to cull cows, market less milk, or retire whole farms indefinitely with no option to return to dairying at some later date.

Cull Cow Programs. Milk production may be reduced through incentive payments to producers to cull more cows than they would normally. For example, dairymen could be paid $300 by the USDA for each additional cull. To eliminate the 16 billion pounds of milk surplus (12 percent of farm marketings) that existed in 1983 would have required a drop in the nation's dairy herd of almost 2 million head. An even greater number of additional cows may need to be culled to reduce the herd by this amount if one takes into account the record level of replacement heifers.

Three major concerns have been expressed about a cull cow program:

- A large-scale cull program could be difficult to monitor and verify.
- Increased culling suppresses beef prices. About 20 percent of the beef supply comes from dairy cattle and about 35 to 38 million head of beef cattle are slaughtered annually. Two or three million more cull dairy cows added to this total depresses beef prices in the short run. However, in the long run a reduced dairy herd eventually leads to fewer culled dairy cows and dairy calves to be fed out as dairy beef.
- Cull cow programs do not guarantee that milk production will be reduced, nor do they measure producer performance relative to milk production. It is simply assumed that greater culling will lead to lower production.

Milk Diversion Program. Milk diversion programs use incentive payments to encourage dairymen to reduce or not increase their milk marketings. Reduction can be achieved through cow culling, lower production per cow or increased farm use of milk. Reductions are measured from a historical base such as the past 2 or 3 years. The milk diversion program was an example of

this type of program, although it is not the only example when one considers all the specific variations that could be made.

Under the milk diversion program, producers who agreed to reduce marketings from 5 to 30 percent below their base received $10 per hundredweight for the difference. Typically, producers who purchase all their feed and use hired labor find it easier to make adjustments and participate in voluntary diversion programs.

Diversion programs only temporarily reduce production. Once the program ends, producers are normally geared up to resume or even increase production above pre-diversion levels. That was clearly the experience with the 1983 dairy diversion program.

Whole Farm Buyout or Termination. A voluntary supply control program also could provide payments for the complete retirement of milk producing farms. One advantage of whole farm retirement is that the entire dairy production unit is eliminated. Moreover, whole farm retirement obligates the retired unit to remain out of dairy production for a given number of years.

The Dairy Termination Program was a voluntary program for producers where the federal government paid producers to leave production, dispose of milking herds and refrain from producing milk for 5 years.

Under the provisions of the program, producers established a marketing base which was an average of marketings for the years 1981-1985, adjusted for partial production years. Potential program participants submitted up to three bids to the government. The bids were the amounts in dollars per hundredweight the producer was willing to receive for the marketing base. If the producer's bid was accepted, the producers were paid the total amount of bid times base. The producer contracted with the Secretary of Agriculture to refrain from producing milk for 5 years. The producer promised to prevent the production facility from being used for milk production. Additionally, the producer was required to slaughter or export all dairy cows.

As a result of the program, about 14,000 milk producers removed almost 1 million milk cows from the U.S. milking herd between March 1, 1986 and August 31, 1987. Despite this large reduction in the milking herd, production in 1987 was less than 1 percent below 1986. Nonparticipants increased production in response to what apparently was interpreted to be favorable future economic conditions.

Consequences of Voluntary Controls

Voluntary supply control programs can be devised to achieve significant reductions in total milk marketings in times of surpluses. This could result in higher prices to dairymen and would reduce costs to the government.

Although voluntary supply control programs can help maintain stable prices, they would not be economically effective in maintaining higher than market clearing prices over the long run. To the extent that producer prices may be held above market clearing levels, consumer prices for milk and dairy products also would be higher and more stable.

Government costs of voluntary supply control programs depend upon the type of producer incentives or payments and the extent of producer participation. If incentives or diversion payments are too attractive, producer participation may be larger than desirable. A provision giving the Secretary of Agriculture the authority to tailor the size of incentives to control the level of participation may be useful.

Problems of geographic milk shortages have occurred with voluntary supply controls. For example, producer participation in both the milk diversion program and Dairy Termination Program was greatest in the south. As a result, a very tight fluid milk supply developed in the south and southeast during the summer and fall. Fluid milk from outside the area was purchased at relatively higher prices to meet the needs of fluid milk processors. Thus, a voluntary supply reduction program, particularly a voluntary program, could misallocate resources in milk production, making it difficult for some high fluid milk utilization markets to obtain sufficient supplies of Grade A milk for beverage needs. Higher consumer prices for beverage milk in these markets also would result.

Like any program that raises producer returns, frequent use of voluntary programs could encourage the inclusion of program benefits in the price of dairy cows.

Experience thus far indicates voluntary programs are not fully effective because they are either not well enforced or cannot be fully enforced. Cases of cow trading under the diversion and termination programs have been documented. The more experience farmers have with voluntary programs, the better they are at subverting them.

5. Mandatory Production Controls

One way to reduce the government's dairy program costs would be to limit production on a farm-by-farm basis. Such a program could cause major changes in milk pricing, milk production levels, farm earnings and farm costs.

What Are Mandatory Controls?

Mandatory production controls set quantitative limits, or quotas, on how much milk can be marketed by each dairy farm. Such quotas usually are set in reference to a farm's historic production level. Under such a plan, any milk produced over the allocated quota would be priced at far below the cash costs of milk production.

This type of proposal is often referred to as two-tier pricing because of the tremendous difference between the quota price and the over-quota price. For example, under such a program, the quota price could be set at $15 per cwt while the over-quota price is set at $1 per cwt. The difference between these two prices eliminates the incentive to produce over-quota milk because the price is less than the extra cost of producing the milk. In some proposals, producers would face legal penalties for over-quota marketing.

Alternative Mechanisms for Implementing

When implementing a quota plan, fairness is always a difficult issue. To prevent a production increase by farmers trying to acquire more quota, such plans are established using old production levels. Accordingly, many farmers will present reasons why they deserve a larger allocation of quota. A board of dairy farmers, or some other mechanism, could be established to review these requests. However, if too many exemptions are granted, the entire quota plan will collapse.

Allocation of new quota could be limited to regions that experience growth in Class I (fluid) milk markets. This new quota could be allocated to existing producers or to new producers seeking to enter dairy farming. However, all such new allocations of quota will be small relative to the magnitude of requests for new quota—particularly if dairying is profitable.

A proposal by Senator Leahy would divide the United States into milk producing regions based on marketing orders and historical distribution patterns and allot a portion of a base level surplus purchased by the Commodity Credit Corporation (CCC) to each region. If CCC surplus purchases above the region's base level develop, producers in the region would be assessed on the surplus CCC sales to bring milk production down.

Under the proposal, regions could not dump their surplus into another region. The Secretary of Agriculture would monitor milk shipments to determine if surplus dumping is occurring. There are several issues that must be resolved in this type of plan. The primary issue is what constitutes "dumping." One interpretation is only milk shipped out of region and sold as products to the CCC. A second interpretation is that dumping would occur when manufactured products produced and sold within or without region of origin displace products from another region in the commercial market, forcing "product displacement" and increased CCC shipments from the other region.

Either interpretation is incongruent with the progressive move toward a national market for dairy products. The plan would avoid recognizing the regional shifts occurring in milk production because of changes in the cost structure of producing milk. Such a plan could hinder continuing trends toward efficient market organization and product movements across markets. The second interpretation of the plan would go further in freezing production patterns, thus maintaining the status quo.

Conditions Fostering Mandatory Controls

When milk support prices are above the long run cost of production, capital and management resources will be invested in milk production. If the support price is lowered, the resources invested in milk production will not be moved out of milk production as fast as they are moved in. In the short run, some producers will continue to increase milk production, actually exacerbating an oversupply situation and encouraging further price cuts. Eventually, a mass exodus of producers and resources from milk production occurs. As milk supplies diminish, prices increase and the cycle repeats itself.

The desire to maintain an adequate supply of milk at stable prices was the impetus for initiating a price support program for milk. However, technological and managerial progress translate into the need for fewer dairy producers and a smaller national milking herd. This adjustment sometimes occurs faster than producers and policymakers can tolerate. Therefore, sometimes as

a matter of political and social choice it is desirable to maintain or ease the decline in producer numbers. Mandatory controls then become an alternative policy consideration when it is desirable to maintain higher than market clearing prices, or to provide a price level necessary to maintain a certain group of producers in the production system without encouraging surplus milk production. Regional shifts in population, regional differences in production costs, uneven and sudden shifts in regional demands have exacerbated milk production resource shifts. These and other types of changes in market structure encourage support for mandatory supply controls to preserve the status quo.

Regional changes in production costs and the structure of the dairy industry have resulted in political pressures to reduce, isolate or reverse the forces of change on traditional milk production regions. This is the origin of proposals such as the Leahy plan. The choice is between allowing economic forces to work their way out or seeking a government policy alternative which sacrifices industry efficiency but eases the pain of structural change.

Consequences of Mandatory Controls

The implementation of mandatory controls would substantially reduce government costs now and in the future. Those farmers who received a production base would have their future profitability practically guaranteed. In the view of many dairy farmers, this guarantee is the main appeal of the quota plan. However, as a consequence, farmers would lose their freedom to risk expanding their milk production.

Consumers would pay more for dairy products than they would without a quota. Some consumers might consider the price of milk to be unreasonably high. As a result, dairy products would have a more difficult time competing against other foods and beverages for a share of the consumers' dollar. It would also speed the acceptance of substitute dairy products made from casein and soybean proteins. Thus, an incentive would be created for the further tightening of quotas and import controls.

Past experience with quotas shows that they may not always reduce production to the extent desired. Any time the over-quota price exceeds the extra cost of expanding production, there are incentives to expand. In addition, if producers anticipate an opportunity to expand base, incentives are present to increase production.

A decision would have to be made concerning the transferability of quota from producer to producer. If no transfers are allowed and the quota is tied to the farm, inefficient farms will have little opportunity to grow. The tobacco program is a classic example of how quotas discourage development of large efficient units.

The quota will take on a capitalized value. Even if no transfers are allowed, all farms will have a market value far in excess of their production value because of the existence of quota. On the other hand, if transfers are allowed, the quota itself will acquire an asset value. In either case, the creation of quota can be viewed as a tax levied by the present generation of dairy farmers upon consumers and acts as a barrier to entry by the future generation of dairy farmers.

The implementation of a quota plan would cause interregional tensions. The producers in each region almost would know that their own economic situation would be improved only if the production of another region were forcibly reduced. In this environment, producer energies are no longer focused on the future health of the entire dairy industry. Instead, the focus becomes their own percentage share of the economic pie. Progress and cooperation become difficult. Any type of regionalization of a mandatory quota tends to lock in historical production patterns, perpetuating and exacerbating regional production utilization imbalances. The tobacco program, and the Canadian Quota program are two examples of this perpetuation of regional imbalance.

A national quota plan could not reduce regional production in exact conformity with regional demand. Therefore, in regions where production is reduced below consumption, milk movement between regions becomes more important than in earlier times when surplus production was common.

To induce milk movement to market, milk prices might be increased in deficit regions. Hence, farmers in these regions would then be able to profitably buy quota from farmers in surplus regions. On the other hand, quota purchases could flow in the opposite direction if surplus area producers did not receive a low enough price for their milk. Either way, this would eventually fuel interregional tensions over the fairness of national quota plan.

On the brighter side, quotas do provide a means of increasing producer returns and stabilizing industries' conditions in the event of chronic overproduction problems. The adverse effects of quotas are most pronounced when they are applied stringently, are inflexible to industry change, are not negotiable, and are used to mutually enhance producer returns.

6. Cost-Sharing Programs

While most people recognize the need for government involvement in the dairy industry, many would like to see dairymen assume greater responsibility for controlling government program costs and stabilizing milk production. This objective has been achieved through the implementation of cost-sharing programs.

What Are Cost-Sharing Programs?

Under a cost-sharing program, dairymen as a matter of public policy are required to pay for a portion of the cost of operating the milk price support program. Cost-sharing or assessment programs have been used during the period 1983 through 1988 as a means of defraying a portion of the cost of the diversion program, termination program, and price support operations.

Cost-sharing programs have a primary goal of reducing government costs associated with dairy programs. Increasingly, the beneficiaries of government programs are being asked to pay for a proportion of their costs. The results have been the initiation of user fees on a wide range of government services. Farmers view such fees as a tax that is to be resisted unless the loss of the program is at stake. However, the program also may be viewed as a producer self-help program whereby government assists in achieving program objectives such as enhancing producer income while maintaining a supply-demand balance.

Alternative Mechanisms for Implementing

Cost-sharing programs can be used to meet the dual objectives of controlling program costs and stabilizing milk production in three ways:

- The assessment could be used strictly to pay for a portion of the cost of operating the milk price support program. In contrast to a fixed assessment, it could be variable, rising when program costs are high and falling or even being eliminated when program costs are low. The assessment could be implemented only when program costs rose above a certain level—say $500 million. Operated in this manner, the assessment would, in effect, automatically lower the milk price support level, much like supply-demand adjuster pricing.
- The assessment could be an incentive for production adjustment. The Dairy Production Stabilization Act of 1983 accomplished this by utilizing the 50-cent assessment to pay dairymen who reduced the production from their base at the rate of $10 per cwt. The milk diversion program, in effect, transferred income from the nonparticipants to the participants—that is, from those who did not volunteer to reduce production to those who did. Another form of this program, in effect only from September through November 1983, refunded a second 50 cents per cwt deduction only to those producers who reduced their production by 8.4 percent.

The 1985 Farm Bill authorized a 50 cent assessment to help pay producers who agreed to terminate.

Gramm-Rudman provisions were met by the dairy sector through a 2.5 cent assessment on milk marketed by producers.

- The assessment could pay for the cost of Commodity Credit Corporation (CCC) inventory management; production adjustment; and demand-expanding product development, advertising and research program components. Such a package might be viewed as the application of a government-industry market management concept. In such a self-help concept, a national hearing could determine decisions on the appropriate combination of support price level; CCC inventory policies; production adjustment incentives; and product development, advertising and research expenditures.

Assessments require a mechanism for collecting and disbursing funds. In the milk diversion program, states blanketed by a federal milk marketing order effectively utilized these offices as a source of information on production and a mechanism for collection of the assessment. Diversion program experience suggested the need for complete information and regulatory activity in Grade B milk producing areas such as Minnesota and Wisconsin. Those developments suggested the need for and desirability of close coordination between and/or consolidation of the administration of all milk programs into a single USDA agency.

Consequences of Cost-Sharing

Without production controls, cost-sharing allows the effective milk price support level to adjust automatically to the market clearing level. Therefore, if the price support is initially set above the market clearing level, the assessment will reduce producer returns without affecting the prices paid by processors or consumers. Prices would be more stable than in the free market because the government would still be buying surplus dairy products. However, producer returns would fall when program costs increase and producer assessments, thereby, rise.

If the assessment is used to control production, producer returns are redistributed in favor of those who control production. Product prices would rise if controls were effective in reducing government stocks to acceptable working levels or lower. Processing cooperatives and other handlers would thereby run the risk of periodic short supplies resulting from misjudgments in the degree of control exercised. However, the less harsh production adjustment option of returning a portion of the checkoff to producers who do control production may avoid some of these overadjustment problems.

The cost-sharing option that integrates inventory management, production control and demand-expansion programs into a single package offers substantial potential for stabilizing the industry while taking measures to expand product demand. Questions, however, arise as to whether the quantity of regulatory activity involved is too great to perform effectively and efficiently. Past experience with high levels of regulation, both within and outside the dairy industry, confirms this concern.

Cost-sharing programs reduce production incentives without affecting market prices for milk and the value of products in storage. When a surplus condition is expected to be temporary, assessment may be the least disruptive means of accomplishing a production reduction.

Cost-sharing programs may be more expensive to society than simply allowing the free market to determine the price of milk. However, such programs could be justified on the grounds of the need to avoid the instability of free market price and income and to produce an overall reduction in direct government program costs.

7. Target Prices - Deficiency Payments

Since it began in 1949, the dairy price support program has worked so smoothly in most years that we tend to forget that there are other ways of achieving dairy policy objectives. An alternative to purchasing manufactured products to support farm prices would be a target price-deficiency payments program.

What Are Target Prices?

Basically, a target price-deficiency payments program is one in which direct payments or deficiency payments would be made to milk producers. Since there would not be a Commodity Credit Corporation (CCC) purchase program for butter, cheese and nonfat dry milk, wholesale product market prices would adjust to market-clearing levels. Producer milk prices would quickly reflect such adjustments. The amount of payment is the difference between the target price and the prevailing market price for producer milk.

Consider the following example of deficiency payments emphasizing the contrast with the present CCC purchase program. Assume that the purchase program is in operation, the support price for milk is $10.60 (3.5 percent butterfat), and CCC purchase prices are $1.32 per pound for butter, $1.11 per pound for cheese, and 73 cents per pound for nonfat dry milk. Further assume that given these circumstances, the Minnesota-Wisconsin (M-W) manufacturing milk price for a given month is $11.12 per cwt.

If the CCC purchase program had been replaced with a deficiency payments program for that same month, let us assume the following responses would have occurred:

- The $10.60 support price now becomes a $10.60 target price.
- In the absence of CCC purchases, wholesale prices for (a) butter drop 12 cents a pound, (b) cheese drop 10 cents a pound, and (c) nonfat dry milk drop 6 cents a pound.
- As a result of the price declines in product markets, the M-W price for the month falls to $10.12, a full $1 lower than the $11.12 reported under a purchase program.
- With the competitive market price at $10.12 and a designated target price of $10.60, a deficiency payment of 48 cents per cwt would be made to producers, not to processors.

Alternative Mechanisms for Implementing

The target price for milk could be identical to the support price. It could be established by the same procedure, whether that be dairy parity, cost of production or some other standard.

Deficiency payments could be designed not just as a means of supporting farm income in the dairy sector, adjusting milk production and enhancing the competitive market position of dairy products. In the feed grains program, for example, deficiency payments are

used as incentives to participate in acreage reduction programs. In dairy, deficiency payments could be made available only to those producers who voluntarily agree to reduce marketings a certain percentage from a base, or in a mandatory program could be refused to milk producers who fail to limit marketings to an amount below their base. Some combination of deficiency payments and supply controls could allow higher target prices than deficiency payments without supply controls because program costs would be more effectively controlled.

In a similar vein, deficiency payments could be limited or targeted to specific groups. Where deficiency payments have been used for other commodities, a $50,000 payment limit per farm has been specified. With a payment limit, larger dairy operations with production levels that exceed the limit would be at a disadvantage. At the same time, milk production on smaller and possibly less efficient dairy farms might increase in response to the payments.

Another possibility would be to extend deficiency payments only to milk used for manufacturing. About 40 percent of the U.S. milk supply is utilized in beverage milk products (Class I) so savings would be proportional. Class I prices could be established by adding Class I differentials to the target price rather than the market clearing M-W price. Thus, producers in fluid milk markets would receive deficiency payments only on Class III milk and would get the full Class I price on Class I usage. This transfers part of the cost of farm income supports from taxpayers to fluid milk consumers. There would be a period when Class I prices would be much higher than normal relative to Class III prices.

Consequences of Deficiency Payments

Target prices would allow the market for dairy products to clear and the resulting lower prices could provide a significant boost to milk and dairy product sales in the long run. The deficiency payments program would permit products to move through markets on a supply-demand basis. In contrast, under the current program CCC purchase prices hold wholesale prices up and thereby weaken demand for manufactured products. Also, the price advantage that some substitutes for dairy products now enjoy would be reduced substantially. Closely linked to the demand stimulus that market clearing prices might generate would be new incentives to promote, merchandise and market dairy products. The easy option of selling to the CCC would no longer exist. Proprietary firms and dairy cooperatives would be challenged to aggressively seek sales in competitive markets. Without an automatic government market energies would be directed at expanding demand. Exporting dairy products without direct subsidies would be possible, although the target price would be challenged in trade negotiations as an indirect subsidy.

The deficiency payments approach would link dairy price policy more closely to overall agricultural policy in the U.S. Critics say the dairy program in recent years has gone its own way—high price supports, purchases, and no supply discipline. Deficiency payments have been a basic tool for cotton, wheat and feed grains since the early 1970s. By adopting deficiency payments, the dairy sector could become an integral part of a more unified agricultural price-income policy.

A final consideration might be that target prices can achieve the price-income goals of the dairy program more reliably than CCC purchases. For example, in the 1981 through mid-1984 period, the competitive M-W price was usually below the support price by 20 to 30 cents per cwt. A deficiency payments program would not be subject to that kind of slippage because the difference between the target price and the market price would be measured directly and payments to farms would be made accordingly.

In the same way that CCC purchases ran into trouble because of high program costs from 1981 to 1983, the deficiency payments approach is also vulnerable on a cost basis. For example, if 48-cent-per-cwt payments were issued for annual marketings of milk of 143 billion pounds, the dairy program would cost almost $684 million. When annual milk production is large, market clearing prices would be pushed to lower levels and deficiency payments would move to high and costly levels. As was discussed earlier, program costs can be reduced by limiting payments or by transferring some of the cost back to consumers, as in the form of higher prices for Class I milk.

A very important short run concern has to do with the disruption of the manufactured dairy products industry. The CCC purchase program is so institutionalized that processors of cheddar cheese, butter and nonfat dry milk would face major adjustments if purchases were abruptly terminated. The nonfat dry milk market in particular, the butter market to a lesser degree, and even the cheese market on occasion have become dependent on the CCC as a residual buyer. Dairy cooperatives have taken on much of the responsibility for handling excess milk supplies in recent years, so they would be challenged to move products commercially and obtain prices for these products that would not disadvantage their members. If a deficiency payments program were adopted, CCC purchases would be phased out or significantly reduced.

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